

CLAIMS

What is claimed is:

1. An additive delivery system for applying additives to a food product on a rollstock machine, the rollstock machine having a forming film formed into at least one cavity, each cavity receiving a food product, the additive delivery system comprising:
 - a first additive delivery device secured to the rollstock machine;
 - a second additive delivery device secured to the rollstock machine, the second additive delivery device being spaced from the first additive delivery device;
 - at least one first nozzle formed in the first additive delivery device for delivering at least one additive into at least one of the cavities prior to each cavity receiving a food product; and
 - at least one second nozzle formed in the second additive delivery device for delivering at least one additive onto the food product within the cavity.
2. The additive delivery system of claim 1 and further comprising:
 - a plurality of first nozzles positioned in a spaced relation along the first additive delivery device; and
 - a plurality of second nozzles positioned in a spaced relation along the second additive delivery device.
3. The additive delivery system of claim 2 wherein each first nozzle is closable independently of the remaining first nozzles and wherein each second nozzle is closable independently of the remaining second nozzles.

4. The additive delivery system of claim 2 wherein each first nozzle can dispense additives different than the additives dispensed from the remaining first nozzles and wherein each second nozzle can dispense additives different than the additives dispensed from the remaining second nozzles.
5. The additive delivery system of claim 1 and further comprising:
a plurality of hoses for delivering additives to the first nozzles and the second nozzles.
6. The additive delivery system of claim 5 and further comprising:
a first product collection area associated with the first additive delivery device;
and
a second product collection area associated with the second additive delivery device;
wherein the first product collection area and the second product collection area collects additives from the hoses and mixes the additives prior to delivery to the first nozzles and the second nozzles, respectively.
7. The additive delivery system of claim 6 and further comprising:
a first pressurized delivery canal for receiving the additives from the first product collection area, each first nozzle being connected to the first pressurized delivery canal; and
a second pressurized delivery canal for receiving additives from the second product collection area, each second nozzle being connected to the second pressurized delivery canal.
8. The additive delivery system of claim 1 wherein the additive is selected from the group consisting of coloring, flavoring, liquid smoke, and seasonings.

9. A method for applying additive to a food product on a rollstock machine, the method comprising:

forming at least one cavity from a forming film;
applying a first additive to each cavity;
loading a food product into each cavity;
applying a second additive to each food product; and
sealing a non-forming film to the forming film over the food product.

10. The method of claim 9 and further comprising:

forming a plurality of cavities from the forming film;
applying the first additive to only a predetermined number of cavities;
loading a food product into each of the cavities; and
applying the second additive to only a predetermined number of food products.

11. The method of claim 10 and further comprising:

maintaining at least one cavity and the food product within that cavity free from
the first additive and the second additive.

12. The method of claim 9 and further comprising:

pressurizing the first additive and the second additive.

13. An apparatus for treating food products with an additive, the apparatus comprising:

at least one cavity for receiving a food product;
a first additive delivery device positioned above each cavity; and
first nozzle means mounted to the first additive delivery device for applying a first
additive to each cavity prior to receiving the food product.

14. The apparatus of claim 13 and further comprising:

a second additive delivery device positioned above each cavity; and
second nozzle means mounted to the second additive delivery device for applying
a second additive to the food product within each cavity.

15. The apparatus of claim 13 wherein each cavity is formed from a forming film capable of forming a cavity.
16. The apparatus of claim 14 and further comprising:
a covering film for covering the food product, the covering film sealable to the forming film.
17. The apparatus of claim 13 wherein the first additive is different from the second additive.
18. The apparatus of claim 13 and further comprising:
a plurality of cavities;
wherein the first additive is applied to only a predetermined number of cavities.
19. The apparatus of claim 18 wherein the second additive is applied to only a predetermined number of food products.
20. The apparatus of claim 19 and further comprising:
additional additives applied to a predetermined number of cavities and food products which do not include the first additive and the second additive, respectively.